Abstract.

It is intended to provide a novel method of synthesizing a nucleic acid oligomer whereby at least 10-mer of nucleic molecule oligomer (for example, a 20-mer) can be synthesized at an extremely high purity by the solid phase method without protecting a nucleotide base, compared with the conventional method without nucleotide base protection allowing the synthesis of a 12-mer at the highest. Namely, a method for the synthesis of a nucleic acid oligomer, includes contacting a phosphoramidite nucleic acid or a phosphoramidite nucleic acid analogue with an activator. The activator of the invention is a mixture of an alcohol-type compound such as hydroxybenzotriazole-1-ol (HOBt), a HOBt-derivative or a phenol analogue; and an acid catalysteharacterized in that an alcohol-type activator with an acid catalyst is used in the phosphoramidite method.